

**REMARKS**

Reconsideration of this application, as presently amended, is respectfully requested. Claims 95-127 and 130 are now pending in this application, new claim 130 having been added by the present Amendment.

**Claim Rejection – 35 USC §112, first paragraph**

Claims 95-127 are rejected under 35 U.S.C. §112, first paragraph. The Examiner asserts “if the application fails as a matter of fact to satisfy 35 U.S.C. §101, then the application also fails as a matter of law to enable one of ordinary skill in the art to use the invention under 35 USC §112.” The Examiner cites the Manual of Patent Examining Procedure (MPEP) 2107.01(IV).

The current rejection under 35 U.S.C §112, first paragraph, is the same type of rejection issued in the Office Action mailed November 2, 2005. This rejection was traversed in the Amendment filed on April 3, 2006. The Examiner found the arguments traversing the rejection to be persuasive and, and, in response to the traversal, the Examiner withdrew the rejection.

Applicants submit the 35 U.S.C. §112, first paragraph, rejection clearly has no merit for the same reasons set forth in the Amendment filed on April 3, 2006.

More specifically, the rejection under §112, first paragraph, is improper under the principles discussed in the Manual of Patent Examining Procedure (MPEP) §2107. The Examiner relies on the Manual of Patent Examining Procedure (MPEP) §2107.01(IV) to support the §112, first paragraph, rejection. However, MPEP §2107.01(IV) relates to applications that

*fail to satisfy the utility requirement* of 35 U.S.C. §101.<sup>1</sup> MPEP §2107.01(IV) is *not* relevant to applications that allegedly fail to claim statutory subject matter.

MPEP §2107.01(IV) indicates that if the application fails, as a matter of fact, to satisfy the *practical utility* requirement of 35 U.S.C. §101, then the application also fails as a matter of law to enable one of ordinary skill in the art to make and use the invention under 35 U.S.C. §112, first paragraph (i.e., the “how to use prong” of §112, first paragraph). In other words, if an application has no utility, then an applicant cannot comply with §112, first paragraph, because compliance requires a description of how to use a presently useful invention. Otherwise, an applicant would anomalously be required to teach how to use an invention that is not useful.

The present application has not been rejected under 35 U.S.C. §101 as lacking usefulness or practical utility. Instead, as set forth in Item 8 of the Office Action, the present application has been rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. It is respectfully submitted that the §112, first paragraph, rejection discussed in MPEP §2107.01(IV) is only applicable when a 35 U.S.C. §101 rejection based on lack of utility can be made, but is not applicable to a 35 U.S.C. §101 rejection based on non-statutory subject matter.

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<sup>1</sup> As discussed in the MPEP §2107, 35 U.S.C. §101 has *two purposes*. First, 35 U.S.C. §101 defines which categories of inventions are eligible for patent protection. An invention that is not a machine, an article of manufacture, a composition or a process cannot be patented. Second, 35 U.S.C. §101 serves to ensure that patents are granted on only those inventions that are “useful.” This second purpose has a Constitutional footing - Article I, Section 8 of the Constitution authorizes Congress to provide exclusive rights to inventors to promote the “useful arts.” Thus, to satisfy the requirements of 35 U.S.C. §101, an applicant must claim an invention that is statutory subject matter and must show that the claimed invention is “useful” (i.e., has practical utility) for some purpose either explicitly or implicitly.

Accordingly, it is submitted that the rejection under 35 U.S.C. §112, first paragraph, is improper and should be withdrawn. Reconsideration and withdrawal of the rejection under §112, first paragraph, is respectfully requested.

### **Claim Rejection – 35 USC §101**

Claims 95-127 are rejected under 35 USC §101 because the claimed invention is allegedly directed to non-statutory subject matter.

As will be discussed below, claim 95 has been amended to obviate the rejection under §101.

In the rejection, the Examiner asserts that the claimed invention is directed to nonstatutory subject matter for the following reasons:

...abstraction and/or software per se. Independent claim 95 recites a: “computer-implemented graphical user interface comprising a display displaying a parent profile representing an outline for design, the outline delineating a shape of a physical structure”. Examiner considers “an outline for design, the outline delineating a shape of a physical structure” to be a geometrical abstraction of the actual physical structure as viewed or measured by some sensing system. Examiner considers the ‘computer-implemented graphical user interface’ to be software only.”

Thus, the Examiner bases the rejection under §101 two assertions (1) that the claimed invention is an “abstraction” and (2) that the claimed invention is directed to “software per se.”

Initially, it is submitted that the rationale supporting the rejection under §101 is conclusory, and does not provide reasons in support of the rejection. For example, the Examiner asserts that the invention recited in claims 95-127 is directed to “software per se”. However, it is

quite clear that the rejected claims include a “display,” which is clearly not software. The rejection does not address the fact that a display is claimed.

Further, the Examiner asserts that the recitation of “an outline for design, the outline delineating a shape of a physical structure” is a “geometrical abstraction of the actual physical structure....” It is true that the case law supports the proposition that claims directed to an *abstract idea*, natural phenomena or law of nature have been found *not* patentable under §101. For example, the case law supports that “nothing more than the manipulation of basic mathematical constructs, [is] the paradigmatic ‘abstract idea.’” *In re Warmerdam*, 33 F.3d 1354, 1360 (Fed. Cir. 1994).

However, when the mathematical algorithm or software is tied to a machine (e.g., a computer) and produces a useful, concrete and tangible result, the courts have found the claimed subject matter to satisfy §101 (see, e.g., *State Street Bank*, 149 F.3d at 1373 “[W]e hold that the transformation of data . . . by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm.”).

In the instant case, even assuming, *arguendo*, that claim 95 is considered to recite an “abstract idea” (e.g., a mathematical algorithm executed by software), the “abstract idea” is connected to a machine (i.e., a computer and display) and generates a useful, concrete and tangible result (a new outline for a design). Therefore, Applicants respectfully submit that the claims, even prior to amendment, satisfy the requirements of 35 USC. §101.

Nonetheless, claim 95 has been amended to clarify the structural aspects of the user interface. It is respectfully submitted that claim 95 recites a user interface that defines a

“machine,” which is considered statutory subject matter under 35 USC §101. Accordingly, reconsideration and withdrawal of the rejection under 35 USC §101 are respectfully requested.

**New Claim**

New claim 130 has been added by the present Amendment. New claim 130 recites a method of designing a structure using a computer implemented system having a user interface including a display and selection device.

**CONCLUSION**

In view of the foregoing, it is submitted that all pending claims are in condition for allowance. A prompt and favorable reconsideration of the rejection and an indication of allowability of all pending claims are earnestly solicited.

If the Examiner believes that there are issues remaining to be resolved in this application, the Examiner is invited to contact the undersigned attorney at the telephone number indicated below to arrange for an interview to expedite and complete prosecution of this case.

Application No.: 10/649,936  
Art Unit: 2121

Amendment under 37 C.F.R. §1.111  
Attorney Docket No.: 991334A

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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